Colorado River Citizens' Forum
February 21, 2006
***Tentative Meeting Notes**

Board Members in attendance:
Brian McNeece
Pablo Orozco
Marie Barrett
Wade Noble
James Davey

Board Members absent:
Roger Gingrich
Tracy Register
Paul McAleese
Eric Reyes

Staff in attendance:
Al Goff
Anna Muñoz
Carlos Pena

MxIBWC staff in attendance:
Francisco Bernal
Alfredo De La Cerda

Members of the public in attendance:
Rick VanSchoik, Southwest Consortium for Environmental Research & Policy
Joan Storm, CRWQCB #7
Jose Figueroa, CRWQCB #7
Luis Enriquez, NADBANK
Efrain Munoz, CESPM
David Vazquez, CESPM
Jose Aguilar, CESPM
Arturo Encinas, MAPA
Edith Santiago, Sonoran Institute
Maria Noriega, Mexican Consulate
Monique Lopez, Institute for Socio-Economic Justice
Bill DuBois, California Farm Bureau
Adrian Perez, SWRCB
Steve Charlton, IID
Ron Enzweiler, Executive Director, Salton Sea Authority
Russell Kitahara, CVWD

Welcome and Introductions

Al Goff welcomed the attendees. He asked the board members to introduce themselves. He then asked attendees to introduce themselves.

Mexicali II update – Efrain Munoz, CESPM, General Director

A PowerPoint presentation on the Solution for Treatment of the Mexicali II Wastewater System in the Arenitas Plant was presented.

The system is split into four sections; Mexicali I, Mexicali II, Mexicali III-A and Mexicali III-B.

The Mexicali I zone which corresponds with what was the City of Mexicali from the beginning of the last century until approximately 25 years ago when the concept of the New Mexicali was developed.

The Mexicali II zone is the area, which belonged to Pacific Land Company (popular name of "Palaco"). This is the zone where the population and industrial growth has been generated during the two most recent decades.

Mexicali III A & B in the recent years and coming years, plan to manage a part of the city's growth in comparison with the current Urban Municipal Development plans.

Operation of the System

The Mexicali I system, flows East-West and North-South.
The subsystems Mexicali III-A and III-B, is a sewerage system that has been under construction since 2003.
The Mexicali II system spills into the New River without any treatment.

In December 1997 the COCEF (or Border Environment Cooperation Commission, BECC, in English) certified the City of Mexicali Sanitation Program, with intentions to manage the sanitation of the New River. The Program contemplated the restoration of 31,128 m of existing concrete tube, mud and ABS, in collectors and sub collectors in different parts of the city, which benefited a population of 440,000.

On the other hand, it is considered that the installation of 147,856 m of PVC tubing of 8 " up to 42 " of diameter for the construction of collectors, sub-collectors, wet wells, pressure lines and 21 sewerage systems in the Colonia Orizaba, and the Southwestern zone of the city, will benefit a population of 137,922.

Fundamental part for the Sanitation of the city was the construction of Power Plant #4, a pressure line of 10 Km and a treatment facility in " The Choropo ", with the capacity of 880 l/sec in its first stage.

Mexicali II was anticipated to be constructed in the area located in the limits of the town "The Choropo" but in 2001 the local residents rejected the project. CESPM needed to change the site of the treatment facility away from human presence. Found another site 27 kilometers from the city known as "The Arenitas" adjacent to Cerro Prieto.

Because of the relocation, the treatment facility had to receive a new project certification by the COCEF.

Project for the Mexicali II Wastewater Treatment Plant

For the First Stage (880 lps):
The work consists of a pressure line of ductile iron of 48 " (122 cm) tubing that will take the Wastewater 27 kilometers from the Pumping Plant No. 4 to the treatment plant in "The Arenitas ".

The treatment facility will be constructed under the form of "turnkey", but theoretically one handles a proposal of a system lagoon formed by a series of partially aerated lagoons, optional lagoons and lagoons of maturation or polishing, that will finally drain towards the Delta of the Colorado River in Mexican territory

Treatment facilities will use 247 acres of the 1500 acres of The Arenitas. The rest will be used for recreational use such as a golf course, gardens, private school and club, campgrounds, agricultural and cattle exhibitions.

Pumping Plant No. 4 is 80% complete; pressure lines installation is at 93% complete; Las Arenitas is 51% complete. Total project is at 82% complete. Will be operational by September 2006.

2000 trees have been planted and irrigated by an automatic system.

Goal is to have 100% of the wastewater treated.

Question: Lagoons considered part of the treatment process, when discharges to Rio Hardy, will they use the water for agriculture? And is it tertiary treatment?

Water is not tertiary, treated only to secondary. Can have human contact. Water will be used for other uses.

Question: Are discharges into New River at one point and is the Gonzales Ortega treatment plant functioning?

Pipe connection from Gonzales Ortega to Pumping Plant #4 was completed in 2001. All raw water still discharging into New River will go back to treatment plant (G.O. to Pumping Plant #4) then to Las Arenitas.

Al Goff, USIBWC, commented on the considerable amount of progress of the improvement in the elimination of discharge to the New River compared to years ago.

Francisco Bernal, MXIBWC, commented on working on the better use of the water in Baja California. Working with the Water Users on conservation use. Idea is to have a better project to include all wastewater including New River. The goal is to have use for all the water so it does not cross into the U.S.

Question: Mexicali II Plant will be able to serve how many residents?

Mexicali II will serve a population of 300,000 and Zaragoza (Mexicali I) will serve a population of 300,000.

Question: When will water be flowing into the Rio Hardy?

Not sure due to percolation.

Question: Will lagoons be lined?

No, lagoons will not be lined.

Question: Water that is en-route to the Delta, can anybody use it? Will all the water be from the plant?

Water can be purchased. Part can be from irrigation districts.

Question: Can water be used for restoration?

Will be used for restoration. It will be difficult to be able to use all the 880 lps. Variations/fluctuations of flows means we will always have extra.

Question: What is the plan, if any, on the water that continues to flow to the U.S.?

Goal is to eliminate raw sewage, the discharge will be wastewater/irrigation water that will not be as polluted. Working with other locations to discharge. There will not be industrial discharges. Water going into the U.S. an average of 4 lps will be usable water.

Mexicali I is being rehabilitated right now. Has improved water quality and reduced contamination.

Question: What amount of flow will be decreased after September?
Total will be reduced by 20%.

Working on Mexicali III funding and approval. Have other wastewater treatment plants in Algodones, Ciudad Morelos, Kilometer 43, 57 and San Felipe, refurbishing and expanding.

Question: Has there been any other proposed electrical power plants?
Haven't had any solicitations.

Question for Pablo Orozco: Will the Mexicali project change New River Committee's plan?
Yes, if the flow at the border is reduced, it will change the plan completely.

Mexico invites the public to observe/tour the progress of the project when completed.

<u>New and Alamo River Wetlands Project – Marie Barrett, Outreach Coordinator and Steve Charlton, Project Coordinator</u>

Leon Lesicka and Duncan Hunter to address problems thru the following actions formed the Citizens Task Force on the New River in 1997: obtain grant monies ($8-10m obtained); obtain

necessary permits; construct wetlands (2 sites); construct aeration structures along the New River.

Agencies involved include: Desert Wildlife Unlimited; Imperial Irrigation District; USBR; USEPA; USFWS; USGS; Imperial County; CRWQB; CDFG

Problem contents: Ag runoff; raw sewage; foam; organic compounds; metals; pesticides; diseases.

Wetlands purpose: TMDLS, breakdown nutrients, habitat, absorb heavy metals, filter out toxins, massive food base, process nitrates, release oxygen, remove carbon dioxide, recreation and bird watching.

How does it work?

Decreases acidity, metals, pathogens, trace organics, nitrogen and phosphates.
Aquatic plants provide oxygen to nitrifying microorganisms.
In presence of oxygen, nitrifying bacteria convert ammonium to nitrate that is converted to gaseous nitrogen by denitrifying bacteria and lost to atmosphere.

The Brawley Site has a total of 9 acres, 6 acres of which is the wetlands area. It contains a sedimentation basin plus two wetland cells. The water source comes from the New River.

The Imperial Site has a total of 43 acres, 22 acres of which is the wetlands area. This site contains a sedimentation basin plus four wetland cells. The source of water comes from the agricultural drainage.

Daily flow measurements collected at sediment basin inlet and final cell outlet.

Question: Have you had to clean out sediment yet? No not yet, have been operational since 2000 and has gotten about 1/3 full. Probably will not have to clean for about 15 years.

Question: If and when you remove sediment, where will it be disposed? Will it be hazardous material? Will use the sediment and it will not be hazardous.

Question: What do you analyze in the New River sediment? Looking for coliform.

Water quality collected semi-monthly in 2001, weekly in 2002 and 2003, monthly in 2004 and quarterly thereafter.

Pollutant removal achieved at the Imperial site: Nitrogen 39% reduction; Phosphorus 35% reduction; TSS 96% reduction; coliform 90% reduction and Selenium 24% reduction.

Pollutant removal achieved at the Brawley site: Nitrogen 59% reduction; Phosphorus 48% reduction; TSS 94% reduction; coliform 97% reduction and Selenium 6% reduction.

Wetlands have very high pollutant removal rates. Future designs must specify whether the focus is load reduction or concentration reduction. Alternative conceptual designs will be considered to maximize use of the available area for treatment. 4,000 acres of treatment wetlands could make a significant load reduction in New and Alamo Rivers. The wetlands do not act to concentrate SE in water or sediments.

Pilot Project

The Imperial site has 68 acres off Rice Drain. Source of water is agricultural. Has a settling pond of a maximum depth of 14ft and four wetlands (22.7 acres) with a maximum of 4-6 ft. Flow rate of 4 cfs. Total water in pond 127 af, 18 days retention time.

The Brawley site has 7 acres on Imperial Research Station. Source of water is the New River. Has a settling pond with a maximum depth of 14ft and two wetlands (6 acres) with a maximum depth of 4-6 ft. Flow rate of 1 cfs.

Future of the project:

- Reconnaissance inventory of wetland and sedimentation basin site New and Alamo River completed.
- Elevations are being identified
- CEQA/NEPA permits – working with Salton Sea Authority
- Westmorland wastewater wetlands – functioning with freshwater/ bulrushes/trees planted
- Brawley wastewater wetlands – in process of purchasing property; working with CalTrans and BOR
- Holtville wastewater wetlands – process of lot split in order to purchase property; draft engineering plans completed.
- Shank Rd/Alamorio store site – draft engineering plans completed

Outreach:

- Calexico New River Committee
- Salton Sea Authority
- Ca Dept Fish a& Game
- Westmorland, Brawley and Holtville
- IC property services
- Schools ($35,000 grant)
- Serve on the Salton Sea Advisory Committee (DWR)

Question: Reduction in selenium, does it volatilize or is it captured in the soil? It does both.

More information available at newriverwetlands.com

<u>Calexico New River Committee – Pablo Orozco, Executive Director</u>
A New River Environmental Justice Pilot Project Update PowerPoint presentation was shown.

The New River Committee was built from concerned citizens in 2001. In December 2004, approached CRWQCB that implemented the Pilot Project.

Some of the partners include: Calexico New River Committee, USEPA, Mexican Environmental agencies, Torres Martinez Tribe, Imperial Irrigation District, Imperial Co. Farm Bureau and the Salton Sea Authority.

The New River has been regarded as the most polluted river in the U.S. since the 1940s.

The goal of the project is to develop a children's environmental risk reduction plan where tools to best access cumulative impacts will be identified and inventory of precautionary approach will be essential, be establishing common guidelines for public participation, especially among impacted groups.

The objective is to establish a Regional Advisory Group comprised of community, government and Tribal members impacted by decisions for activities along the New River and conduct meetings on a regular basis for the duration of the Pilot Project.
Will identify best methods for maximizing public and Tribal participation.
Research and provide all available data to conduct cumulative impact analysis.
Research and inventory all tried or proposed precautionary approaches.
Develop and implement a children's environmental risk reduction plan. Evaluate existing and establish long-term strategies to reduce farm runoff contaminants. And evaluate existing and establish long-term strategies to work with the Mexican government to reduce raw sewage flow in the New River.

The Impact on Tribes: One-third of the Torres Martinez Tribal land is under the Salton Sea. All decisions made affecting the New River, impacts the Salton Sea, which impacts the Tribe. Is Salton Sea level is lowered; contaminated soil is exposed, causing new environmental issues for the Tribe.

Update: The Regional Advisory Group has been established as of early June 2005. Has held four meetings of the Regional Advisory Committee. Established Technical and ChERRP Subcommittees. Mexican officials from City and State Environmental Agencies and Mexican Consulate in Calexico attending meetings. Next meeting to take place in March 2006. Will request technical advice from USBR and IBWC for sanitation projects.

More information available at www.calexiconewriver.org

Question: Will the entire New River be encased? No, will build beside the New River to reroute the water.

Carlos Peña, USIBWC, El Paso, announced that USIBWC is entering into a MOU today with the City of Calexico to design and construct trash racks at the boundary.

Suggested Future Agenda Items
No topics were suggested.

Next meeting to be scheduled May in Yuma County.

*Meeting notes are tentative and summarize in draft the contents and discussion of Citizens' Forum Meetings. While these notes are intended to provide a general overview of Citizens'

Forum Meetings, they may not necessarily be accurate or complete, and may not be representative of USIBWC policy or positions.